

REMARKS

Claims 1-6, 8-24 and 27 are pending in the application. Claims 7, 25, and 26 have been canceled. Claims 5, 6, 8, 9, 16, and 17 have been withdrawn from consideration.

Claim Rejections - 35 U.S.C. § 103

Claims 1-4, 7, 10-15, and 18-27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Poole et al. (USP 5,386,775) in view of Kishi et al. (USP 4,021,275) in further view of Hinshaw et al. (USP 5,241,281). This rejection is respectfully traversed.

Pending independent claims 1, 2, 12, 15, and 27 positively recite the presence of “0.5 to 5% by mass of phosphate glass” and “1 to 15% by mass of aluminum hydroxide.”

The DECLARATION UNDER 37 C.F.R. § 1.132 of Dr. Jianzhou Wu presented herewith provides evidence of the unexpected fact that a gas generating composition comprising 0.5 to 5% by mass of phosphate glass and 1 to 15% by mass of aluminum hydroxide dramatically improves the combustion temperature and the composition of the generated gasses.

Dr. Wu reports an experiment in which the performance of gas generating composition having 0.5 to 5% by mass of phosphate glass and 1 to 15% by mass of aluminum hydroxide in accordance with the present invention was compared to the gas generating composition of Poole's reference having 14.10% of guanidine nitrate, 47.9% of strontium nitrate, 8.0% of clay, and 30.0% of potassium 5-aminotetrazole.

In the experiment, the calculated combustion temperature of the gas generating composition of the present invention was 1390°C, while the calculated temperature of the gas generating composition of the Poole's reference was 1821°C.

Further, in the experiment, the composition of generated gasses of the present invention were 19ppm of NO_x and 180ppm of CO, while the composition of generated gasses of the Poole's gas generating composition were 1963ppm of NO_x and 528ppm of CO.

Dr. Wu concludes based upon the experiment that the use of gas generating composition having 0.5 to 5% by mass of phosphate glass and 1 to 15% by mass of aluminum hydroxide as claimed in the above-identified application exhibits unexpected results. Accordingly, reconsideration and withdrawal of the rejection of record is earnestly solicited.

Claims 25 and 26 have been canceled.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Conclusion

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of the pending claims in the present application are respectfully requested.


The Examiner is respectfully requested to enter this Reply After Final in that it raises no new issues. Alternatively, the Examiner is respectfully requested to enter this Reply After Final in that it places the application in better form for Appeal.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi (#40,417) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

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Respectfully submitted,

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Attachment: Declaration under 37 C.F.R. § 1.132 - Dr. Jianzhou WU